Anterior Prostatic Cyst Causing Acute Urinary Retansion in a Young Patient

Genç Bir Hastada Akut Üriner Retansiyona Neden olan Anterior Prostat Kisti

Prostatic Cyst Causing Acute Urinary Retansion

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Özet

Prostat kistleri nadirdir. Çoğunlukla, asemptomatiktir ve prostat posterior alanından köken alırlar. Anterior yerleşimli prostat kistleri posteriora göre çok daha seyrektir. Akut üriner retansiyon ile başvuran 41 yaşındaki erkek hastada prostatik kist saptandı. Kiste transüretral rezeksiyonu (TUR) yapıldı ve histopatolojik değerlendirmede kolumnar epitel ve proliferatif ürotelyal astar ile kaplı bir benign kist olarak raporlandı. Özellikle obstrüktif alt üriner sistem semptomları olan genç erkeklerde prostat kistleri nadir görülür ve TUR ile prostat kist tedavisi oldukça başarılı sonuçlar alınan minimal invaziv bir yaklaşım gibi görünmektedir.

Anahtar Kelimeler

Kist, LUTS, Prostat, Akut Üriner Retansiyon

Abstract

Prostatic cysts are rare entities. Mostly, they originate from the posterior area of the prostate and asymptomatic. Anterior location of the prostatic cyst is rarer than posterior. The prostatic cyst in a 41 year-old man presenting with acute urinary retansion. Transurethral resection (TUR) of the cyst was performed, which revealed a benign cyst lined with columnar epithelium and proliferative urothelial lining on histopathological evaluation. Prostatic cysts particularly in young men with obstructive lower urinary tract symptoms are rarely seen. Management of the prostatic cyst with TUR seems to be a minimally invasive approach with successful outcomes.

Keywords

Cysts; LUTS; Prostate; Acute Urinary Obstruction

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Introduction

Prostatic cysts are very rare disease of the prostate that usually asemptomatic and diagnosed insidentally during transrectal or abdominal ultrasonography. Prostatic cysts are observed in 0.5% to 7.9% of patients and are classified into six distinct types [1]. Most of them are origined from the posterior area of the prostate as an embriyologic remnant [2]. The semptomatic cysts may be confused with BPH or neuropatic bladder when they presented with lower urinary tract symptoms [3]. To date, there have been fewer than ten published case reports which cysts are existed on anterior area of the prostate in the world.

Case Report

A 41 year-old man applied to our outpatient clinic with severe lower urinary tract symptoms (LUTS) included pollakuria about 10-11 times, nocturia about 5-6 times, dysuria, weak urine stream, residual urine sensation that appeared by 8 months. His symptoms were sufficiently responsive to the antibiotics and alpha blocker therapy. The International Prostate Symptom Score (IPSS) was 21. Both physical and digital rectal examination of the patient was normal. Lastly, the patient applied our clinic with acute urinary retansion and an urethral catheter was performed.

In laboratory examinations, the urinalysis was normal and the urine culture was negative. Ultrasonography (USG) was performed, the prostate volume measured 25 mL and a cyst was detected on anterior wall of the prostate. The cyst was anechoic and appeared to be obstructing the bladder neck on the transrectal USG.

A large, fluid-filled cyst with a smooth surface was located in the anterior and midline area of the prostate and was protruding into the bladder neck on cystoscopy (Figure 1a-b). The cyst appeared to be obstructing the bladder outlet by a ball-valve action. There was no lateral lobe prostatic hypertrophy. The bladder was intermediately trabeculated. Both ureteral orifices were normal and distant from the cyst. Transurethral resection (TUR) of the cyst was performed by base of the cyst (Figure 1c-2d). Any complication did not occurred during operation. The histopathologic findings were consistent with a benign cyst lined with columnar epithelium and proliferative urothelial lining. We performed a follow-up check at 3 months after surgery. Postoperatively, IPSS decreased 12 and Qmax increased to 19 ml/sec with minimally residual urine. There was neither erectile dysfunction nor retrograde ejaculation.

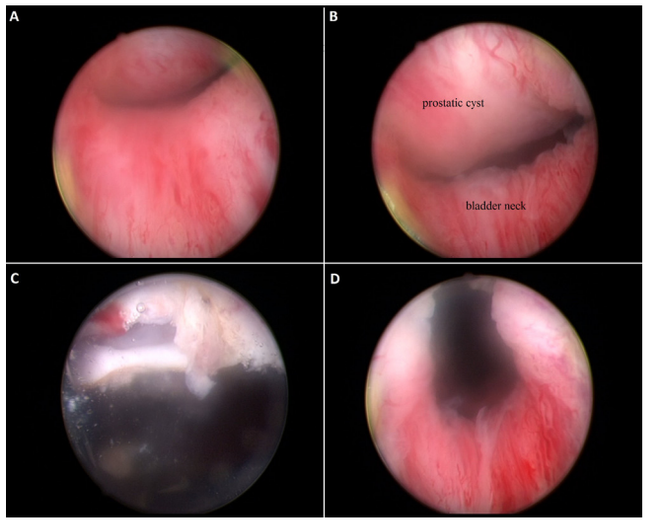

Figure 1. Anteriorly positioned midline prostatic cyst of the bladder neck. It was located in the anterior and midline area of the prostate and was protruding into the bladder neck at the precise twelve o'clock position(A,B). Interior view of unroofed prostatic cyst(C), After cystic resection, the opening of bladder neck(D).

Discussion

Prostatic cysts are commonly located on the posterior surface of the prostate, which might suggest that these cysts could be originated from the prostatic capsule. Anterior location of the prostatic cyst is very rare. Symptoms related to prostatic cysts have been reported to be of irritative and/or obstructive LUTS, decreased ejaculate volume, painful ejaculation, and infertility [4]. Galosi et al. classified 6 distinct cyst types based on TRUS and pathological features, including midline cyst, cyst of the erectile dysfunction, cyst of the parenchyma, multiple cysts, complicated cyst, cystic tumor, and cyst secondary to other diseases. Three percent to 7.5% of asymptomatic patients have medial cysts, and 5% of patients have LUTS [1]. Tambo et al. analyzed 34 patients with symptomatic cysts [5]. Fourteen (40%) patients complained of obstructive urinary tract symptoms, 11 (33%) of urinary retention, 3 (9%) of urodynia, and 2 (6%) of infertility.

Galosi et al. reported that midline cysts are observed by transrectal USG in 9.8% of cases [1]. Most midline cysts, however, are located posteriorly [6]. Approximately 40 patients with symptomatic prostatic cysts have been reported [5,6]. Diagnosis can be made through medical history, physical examination, urine analysis, abdominal and transrectal USG, uroflowmetry, cystoscopy, computed tomography scan, and magnetic resonance imaging [7-8]. We used USG as imaging method.

Treatment of prostatic cysts include TUR, endoscopic marsupialization, endoscopic urethrotomy and incision, transrectal ultrasoundguided drainage, and open surgery [7]. Particularly in young patients, transrectal ultrasound-guided aspiration of the cyst might also be performed when possible. We performed TUR on our patient. The most important complication of transurethral resection includes injury of the urethra or bladder, which is located near the thin base of the cystic mass.

In conclusion, symptomatic prostatic cysts are rarely seen lesions and patients might present to the urology departments with infravesical obstructive symptoms. Therefore, we should consider prostatic cysts particularly in young men with obstructive LUTS. Management of the cyst with TUR seems to be a minimally invasive approach with successful and satisfactory outcomes

Competing interests

The authors declare that they have no competing interests.

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